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Feeling Home

by

Yahui Gao

A Thesis Submitted in Partial Fulfillment of the Requirements for
the Degree of Master of Fine Arts in Furniture Design

School of American Crafts
College of Art and Design

Rochester Institute of Technology
Rochester, NY
August 13, 2020

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ABSTRACT

For the thesis, I designed and created individual pieces of furniture and other objects that contribute to a sophisticated, cohesive atmosphere that reminds viewers of home: a comfortable and happy environment. The reason I chose this concept is that I have been away from my hometown for a long time, where I am familiar and relaxed in my surroundings. As time passed, I missed the comforting atmosphere of my home. Therefore, I used furniture as a structural element to build and create a place that inspires home emotions.

Referring to Asian culture and aesthetics, I chose the concept of the circle as my guiding design inspiration. The circle means being together, harmony, and all-encompassing completeness. A circle is also a form that exists everywhere in daily life and throughout human culture, from the sun and moon to objects in our everyday household. Therefore, the circle is a critical connection to my work.

I strive to bring closeness to the relationship between furniture, home, and atmosphere. Home is the place where people live, and in this space, furniture is a crucial part of building a home. It is also an essential tool that helps us in our daily life. I embody the concept of home and its atmosphere into my work through details, choice of materials, manufacturing processes, and my design language.

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INTRODUCTION

Furniture is an important material element of the home and an indispensable part of people's daily lives. My search for meaning as a furniture designer and maker will be a lifetime devotion. I am not a simple, thoughtless furniture-making machine that repetitively produces chairs, tables, or other furniture and cheap objects. Furniture fulfills the essential function of use and also has additional value, which is both spiritual and emotional. My goal is to create human-oriented, emotionally driven furniture that conveys the philosophy of enjoying life while creating a meditative atmosphere.

The concept of the atmosphere is common, often described in life as pleasant, dignified, silent, and others, but also it is intangible, abstract, and ambiguous. Gernot Böhme raises the idea of "atmosphere" is the core of the aesthetic concept and the object of the new aesthetic perception (Böhme 2014). For the thesis, I seek to create a spiritual touch moment, a tranquil atmosphere to relax the body and mind, and a place to temporarily isolating distractions and troubles.

As an international student who only gets home on a yearly basis, I am eager to create my own home atmosphere. My grandmother used to say that any day the family can get together is a holiday. In fact, the majority of the young today are in a similar situation. The rapid technical advancements of society influence them, and their behavior and lifestyles are changing quickly. Accelerated social pace makes them rarely live in the same place or share an old house. For them, it is hard to build up an atmosphere of home when they move into the new location. For a new generation that has moved away from their hometown, I use my own experience and feelings as the starting points to design furniture that could bring intimacy and peace of soul, comfort, and warmth of home to a new environment.

At the time of writing this paper, I am isolating at home due to COVID-19. Most people are also working from home, and students are taking online classes during this nervous period. The

atmosphere of the home is becoming more and more essential. The home is equivalent to entering an oasis, with the outside world, a desert around us, filled with anxiety and insecurity.

BODY OF DOCUMENT

Context

Ink wash painting

Ink wash painting is one of the most representative types of traditional Chinese art with a history of thousands of years. I started to study ink wash painting when I was a child, especially the Song Dynasty's literati paintings. The paintings mostly depict the painter's life situations, interests, and fantasies. They are acting like a bridge between the present-day me and the far-reaching history. They allow me to get close to and understand the lives of the people at that time.

What the Southern Song academy painters and their followers do for their audiences, from emperors to cultivated townsmen, and do supremely well, is endlessly to recall, re-create, and reimagine a lost poetic world... They include the myths of eremitism, escaping from the city to live as a hermit of moving through the natural world and enjoying extended sensory participation in it; of untroubled and uncontaminated human relationships. (Cahill 1996, pg. 55)

Ma Yuan was one of the most important painters of the Southern Song Dynasty. His paintings have a secure connection to Taoism and Buddhism. That is, the emphasis is on rendering the spiritual realm and achieving the beauty of the inner harmony between man and nature. As James Cahill said, Ma Yuan's work has poetic intent (Cahill 1996).



(Walking on a Mountain Path in Spring)

Walking on a Mountain Path in Spring depicts the protagonist who contemplates over the two birds on the wind-blown weeping willow, surrounded by the vibrant peach blossoms. He is twirling his beard and smiling, basking in the early spring's vibrancy. Couplet calligraphy placed in the upper right corner of the painting, which says 'Brushed by his sleeves, wildflowers dance in the wind; fleeing from him, the hidden Birds cut short their songs.' In the background of the picture is a vast and limitless landscape. The large blank areas allow me to focus on his performance of detail. The density of this arrangement, the big and small of the characters, all contribute to the rhythm.

I admired his work as if I were exchanging identities with the protagonist: I entered the painting to encounter nature and empathize with the environment. I was immersed in this emotion, feeling the rhythm of nature with my heart and soul. His work inspires me a lot because it appeals to the senses, captures aesthetic pleasure, and is full of poetry. I appreciate how Ma Yuan spontaneously drew these paintings into my heart in those simple ways, not artificially and against my will. This way instantly brought me closer to his work.

The world rendered by Ma Yuan is one I yearn to inhabit. I asked myself, how can I create a space like this with my own furniture designs? I believe that furniture can bring similar experiences to viewers. For example, a chair with a comfortable angle, a table with a height for easily and quickly grabbing a coffee cup, a floor lamp with bright and softer light, are aspects that create a relaxed aesthetic environment and atmosphere.

Atmosphere

In the early days of my studies, combined with my previous experiences and visions, I had a vague idea that my designs should involve home life. I set out to give users a sense of intimacy and comfort from my work. I gained experience through constant practice with sketches and models and allowing myself the freedom to manipulate materials to achieve my goals. After investigating with paper, leather, metal, bamboo, and other natural material, I found that wood is the perfect medium to elaborate my ideas. Wood allows for the interplay of smooth lines and fluid curves, the building of mass and negative space, it encourages warmth and touches through natural color and grain patterns; all these qualities draw us in under the spell of “wood”. Thus, the affinity of my furniture can express through wood to bring the furniture closer to people. Meanwhile, Juhani Pallasmaa, a Finnish architect, sparked my design ideas. His concept of “atmosphere” guided me to my final work. He proposed a definition for experiential atmosphere: “Atmosphere is the overarching perceptual, sensory, and emotional impression of a space, setting, or social situation.”

Atmosphere emphasizes a sustained being in a situation, rather than a singular moment of perception; atmosphere is always a continuum. The fact that music can move us to tears is a convincing proof of the emotive power of art, as well as of our innate capacity to internalize abstract emotive structures – or more precisely, to project our emotions onto abstractly symbolic structures. ... As we enter a space, the space enters us, and the experience is essentially an exchange and fusion of the object and the subject. (Pallasmaa 2014, pg. 20)

Although the idea of atmosphere is an abstract concept and it is invisible, it does exist. People tend to use their intuition to describe the atmosphere around them: scary, warm, depressing, harmonious, etc. It's all typically defined by one's own perceptions and feelings. The challenge for me is how to construct a preferred atmosphere with the objects I design. I asked myself if I could quantify an atmosphere through aesthetics and sensations. To better understand the components that create an atmosphere, I have focused on factors such as color, dimensions, material, finish, etc.

Further observation and reflection on people's experiences reveal that people behave differently in different spaces such as hospitals, hotels, palaces, bars, etc. These differences could be due to the atmosphere that was imbued by these various environments. Individuals' feelings are affected by the interaction of objective and subjective factors. Juhani Pallasmaa defined the interaction between feeling and atmosphere:

...the immediate judgement of the character of space calls upon our entire embodied and existential sense, and it is perceived in a diffuse and peripheral manner ... Moreover, this complex assessment projects a temporal process, as it fuses perception, memory, and imagination. Each space and place is an invitation to and a suggestion of distinct acts and activities. Atmosphere stimulates activities and guides the imagination. (Pallasmaa 2014, pg. 19)

The materials, textures, colors, and shapes around us can play a vital role in shaping our sight, stimulating our senses, and influencing our impressions.

At this point, I was almost clear about the concept of my thesis, which was to create an atmosphere that resembled a comfortable home—giving the furniture an emotional meaning based on its function. This emotion could communicate and resonate with human feelings. These feelings bring people closer to the furniture and encourage them to spend time interacting within space. The duration of interaction is also an essential element in realizing my vision. The interaction time of users and furniture can silently remove the strangeness, thus

reaching mental relaxation. I started with my strong feelings of home atmosphere and wielded my experiences and culture as the background to develop my thesis. Different people may have different imaginations and interpretations of comfort and relaxation, but we all share a common understanding of what constitutes a home atmosphere. This emotion remains true among different cultures and languages, and it constitutes the foundation of my body of the work.

Evolution

With the above research and study, it became clear that my design should be able to greatly mobilize people's perceptions, memories, and imaginations of home. This design language should be recognizable but not unexpected. Moreover, it should transcend different cultures and regions and be comprehended by most people. This symbolic design language can trigger the viewer's associations and ensure the unity of my multiple pieces to be displayed in the same space. The outcome of the space becomes coherent and consistent because of the unified design language.

I chose circles as my design language. Because circles are one of the most simple and straightforward shapes, they show softness and mildness through the smooth line, which is non-directional and endless. The inherent intimacy of circles relieves the tension and tightness of straight lines. Also, they have a centripetal and clustering effect. Circles are a widespread element in Chinese culture, and in many cases, they have profound meanings such as perfection, fullness, and harmony, and also, they reveal the essence of the changes in nature: everything is auxiliary to each other.

The fluent form and intrinsic meaning of the circle were perfectly in line with my design philosophy. It carried the simplicity of a two-dimensional symbol but also conveyed a profound meaning. Elegance and simplicity are realized by implementing the circle as the dominant element. To better elaborate my design concept with the user, I utilized the circle elements with my work through different permutations and fabrication techniques in the body of work.

In addition to my geometric design language, materials and colors contribute a significant role in developing the viewer's perception of atmosphere. As a type of vastly available material, wood has various types of texture, hardness, and density. However, the common impression of wood is the unique tactility, rusticity, and warmth. This facilitates the building of connections

between the users and products. Based on this characteristic, preservation of the wood's natural properties, such as grain and color, during the production process, is crucial.

I chose to use maple as the primary material for this creation. Maple is a type of tightly grained diffuse porous hardwood. Its surface exhibits a smooth and exquisite feeling after sanding and finishing. A lighter tone wood synchronizes better in my scenario. I chose lighter colors because they could brighten a space and expels feelings of depression from a darker ambiance, thus calming the user (Best 2017). Giorgio Morandi's work delivered a similar concept to the audiences. The tone of his work is not passionate but mild and renders a warm feeling and has a harmony of beauty. I keep a copy of his work on my studio workbench to better understand this composition.



(Natura Morta)



(Still life)

By creating this thesis, I offer an understanding and interpretation of the atmosphere that I perceive as “home base”, which is a space full of comfort and relaxation with light-toned furniture. This body of work summarizes my past experience and also represents an essential step in the pursuit of my vision for future development. Feedback from different users has provided me new insights into the products I created and helped me to rethink what might contribute to the optimal harmonious environment.

The Body of Work

During the development and construction of my work, various aspects of the work became clearer. At the early stage of the fabrication of my furniture, I was apprehensive. Since the delivery of the expected atmosphere was the core part of my design, and I had to ensure that the final presentation could meet the building atmosphere's expectation, that is, audiences' feelings should be homey and pleasant. The overall layout of the space might be a starting point. I was standing in the center of an imaginary empty area and then combining some furniture in this space to present a living scene that reminds one of a home. There might be a lounge chair with a coffee table next to it; small stools surrounded the coffee table to visit friends and hosts to chat. Products built with a large area could contribute to space's ambiance. A towering item might hold the space. Balancing small and large pieces with each other carries a more coherent space. I tried to pay attention not only to the furniture itself but also to the three-dimensional space in which furniture placed. I was searching more for how the furniture combined to create an atmosphere.

Once I had an overview plan, I put my ideas into sketches. Sketching is one of the quickest ways I think to express my thoughts. The outlook of the work was becoming clearer and clearer. On the computer, I could easily adjust the proportions in the Rhino program when I view the model in three dimensions. After doing those processes a few times, I could confirm the proportions and scale of the whole piece. I experimented with the final size through full-size drawings and mockups to ensure that people could feel the comfort and convenience in use. For me, each of these steps was essential because they helped me make the final decision in the maximum possible way in different dimensions.

Having the design and dimensions, I began construction. At this point, I temporarily stopped thinking more about creativity and focused on the building operation at hand. I've been studying hard on how to present ideas perfectly through the techniques of making. I used to be confused about how to balance design and construction. For example, if I had a beautiful

design, but it was hard to accomplish it. What should I do then? Modify the design to fit the building process or study the technique to meet the design goals? Was it worth my investment with such a long and intensive construction time and high material costs? Through the practice of the thesis and discussions with committee members, I realized that my perception of the design was too narrow. Thinking about the way of building in advance is also part of the plan when design, which means that I should have already considered the construction, including the process, technology, joinery, etc.

The body of work created for this thesis consists mainly of a previously completed lounge chair, wall pieces, a coffee table, shelves, and stools.



Lounge Chair
Material: Maple and leather
Dimensions: 28.5" W x 30" D x 31" H

Lounge Chair

I envisioned this lounge chair as a focal point in a space that is as expressive and dramatic as the proud protagonist in the spotlight of a stage play. I tried to show some striking shapes and balance the comfort that the chair should have while sketching. For relaxation purposes, I decided to use a cylinder as a backrest because of the curvature of a person's low back. The surface of the cylinder may be able to better conform to the curves of the body. The finished product is very close to the realization of my vision. The chair's large curved surface and large cylinder backrest are appealing to the eye. I covered the backrests and sitting surfaces with brick-red leather, enhancing the quality and tactility of the furniture. In my mind, a lounge chair should allow one to enjoy time alone or add sweetness to the interaction between family and friends. So, the size of this lounge chair is comparatively loose but not oversized, creating a state of ease and comfort for the user. Besides, the user can sit on the front, and the cylindrical

support also allows people to lean on the back. In this free environment, the furniture acts as a conductor for a person to person relationships.



Wall Pieces
Material: Maple
Dimensions: 28.5" W x 28.5" D x 1.15" H

Wall Pieces

To enhance the ambiance, I decided to make pieces to place on the wall.

I thought of utilizing the blank space on the wall, much like hanging paintings or other decorations on at home.



(Daisen-in)

The Japanese rock garden inspired my wall pieces. The objective of a Zen temple and garden is to imitate nature as it is, not as it actually appears, and to aid meditation on the true nature of existence. Daisen-in is one of the five most important Buddhism temples of Kyoto. When looking at Daisen-in garden from the Abbot's study-room to the northeast corner, the scene through the window looks like a three-dimensional landscape painting. The grounds of the garden are covered with vast areas of white sand. The sand is plowed out in various textures like waves and ripples, sporadically dotted with rocks and greenery. This scene reminds me of the aforementioned ink wash paintings of natural landscapes depicted by Song Dynasty painters such as Ma Yuan. The painter left a properly proportioned blank area in their pictures. This blankness is a chance for viewers to breathe. As people quietly experience the landscape and the empty spaces, time slips away, and the thoughts grow deep.

I used the circle as the basic shape and removed a small part of it. I was trying to say that the ring was representative of the whole family, and the small part that was missing is like me right now. Despite the absence, the audience could still see this looks like a circle. But, against the

circle, it does have a part of it missing for now. Plus, I drew on the spirit of Zen and the Japanese garden. Aesthetics of work lies not only in the overall visuality but also in the multiplicity of imagery experienced through meditation. The stillness of the form may have a powerful vitality, and the pattern gives infinite room for imagination. I used a computer numerical control router (CNC) to engrave circles and lines representing evanescent waves. The simple shapes and large blank spaces are to the imagination.



Coffee Table
Material: Maple
Dimensions: 34" W x 34" D x 18" H

Coffee Table

The coffee table's top consists of two parts, both of which are part of a circle with a diameter of 23 inches. The two sections are different heights so that they can be combined and used together. When combined, they look like a complete circle when viewed from above. The circle symbolizes reunion and unity. This meaning corresponds with the action of "combination", reinforcing the concept of "reunion". I pictured placing this table next to a single chair to create

a quiet corner or between two people facing each other. Additionally, this coffee table could be divided into two parts and used in different situations, such as side-by-side for multiple people. I was achieving the goal of designing elegant shapes while improving the practicality of the furniture. I cut grooves in this table leg with the CNC, like the last wall pieces. The aesthetics of Chinese painting inspired the contrast between the dense texture of the legs and the simple shape of the face; some areas are simple and straightforward, while others are crowded and complex, enhancing the interest when viewing them. When there is light shining on the table legs, the patterns enhance the interaction of light and shadow.



Shelves

Material: plywood and maple veneer

Dimensions: 27" W x 12.5" D x 70" H

Shelves

I made this cabinet intending to use its height and volume to enrich the space. It may not be necessary, but it could be an option. Think of a room's main view as a picture, and the furniture as the main object in it. One supposition is that these objects could all be small volumes of furniture such as side tables and stools in this picture. They are all on a level line because of their comparable sizes. Another supposition is that there are small items as well as large volumes at the same time. I preferred the second option. In this way, I think, the composition can be more coherent and balanced, as in Ma Yuan's work mentioned above. On a functional level, it was important to consider the height of the users to facilitate daily use. Therefore, the final height is 70 inches.

The use of the circle as design language continues the idea of the previous coffee table, that is, through the arc to form a complete circle. The shelves consist of three longitudinally cut-out

circles; each circle has four additional parts. Those parts are separate spaces for items. Users can gain access from both sides of the shelf. This design may make the shelf look neater from the front. The shelves have different sizes of space. In a large room, it is possible to store books and albums. Books will not fall over by using the shelf dividers. The hollowed-out sector reveals the beautiful covers of the books. The owner's collection can also be carefully placed on a shelf for display. Excellent exhibits are highlighted on these minimalist shelves. The furniture should be a foil to the beautiful life of the owner. I chose plywood as the primary material and re-veneered the surface by maple veneer, so the shelves do not deform over time.



Stools

Material: Maple

Dimensions: 14" W x 14" D x 17" H

Stools

Those stools were the purest shape of my creations, but it was an entirely new experiment and learning. My professors and I discussed various construction plans to work out what would make the most sense. With their guidance and encouragement, I completed a brand-new technique: the stack lamination. The new skill led me to a further understanding of the qualities of solid wood. Talk to the wood in the language of the wood. The experience made me realized that delving more in-depth into materials and techniques allows me more freedom to explore forms and attain my ambitions. Fortunately, this process of exploring had made me more confident. To increase the structural integrity of the stool, I added a 3/4-inch diameter metal threaded rod aligned vertically within the laminations. To achieve perfect results, I subcontracted Jared Abner, a woodworker and RIT student with extensive lathe experience, to turn these large stool sections on the lathe.

The negative space formed between the two completed stools side by side becomes a circle. By using negative space, the design language of the circle is revealed in a new way. I tried to display my design sensibility in as many different ways as possible. This allows the viewer to

observe the design from different perspectives and make new and unexpected discoveries while in use. It also enhances the richness of the expression of the product in the same space.

Functionally, the stools can be used temporarily as a side table to hold a few books or a coffee cup. I want the furniture to be available when there is a need in my home. It plays an extraordinary role as a convenient and powerful helper in life. The relationship between people and furniture is not just a simple one of use but also a dependence. After the user gives affection to the item, that use and companionship naturally bring relaxation.

CONCLUSION

This thesis work is based on the concept of home and its atmosphere. Each piece in this body of work shares the same design language of “circle”. By applying this element to each piece, and by echoing between them, I created the atmosphere I intended to express, that is, close and comfortable environment.

There is no doubt that wood as a natural material can provide a sense of calm and relaxation, but unfortunately, it is not easy to achieve in some cases because of wood’s physical characteristics. So, I incorporated various processes for working wood in my furniture, including coopering, bent lamination, CNC, veneering, and I also used hidden metal parts in critical areas to meet structural requirements without distracting from the overall beauty of the design. With regard to my choice of material, the light-color of maple is visually restful. The characteristics of this wood species provide a light tone that showcases the overall form of each piece and provides a backdrop for important details such as shadow and pattern.

My understanding of the realization of successful concepts has deepened through this year’s work. I also learned how to balance the expression of design with physical constraints. As a furniture designer, I have gradually mastered the process from design concept, sketching, model making, construction, assembly, and finish of each piece.

There is no end in my creative journey because it can always be refined as I learn more about philosophy and craftsmanship. There are some inspirations I am keen to pursue in the future. One is that I would like to explore the representation of the circle through wood. In addition to the expressions of negative space, piecing, and assembling that I currently use, as well as techniques such as bending, coopering, and CNC, there should be more iconic presentations and expressions in design. Second, I will continue to delve into woodworking and construction techniques. The graduate school experience has been rewarding, but it’s not enough. I would like to remain a student, always to learn more skills and craftsmanship to support my quest to

make pieces where the quality of craftsmanship and design are inseparable. Thirdly, I will continue to explore ways to bring happiness to people through design. I believe that the furniture I design and make will progress with my vision and thinking.

My aspiration is that one day, my prototype concept can be mass-produced so that more users can enjoy high-quality woodworking furniture. People can pass the furniture from one generation to the next or move it from one place to another. All this will expand the happiness that furniture brings to life.

It is a pity that I did not hold the thesis exhibition. I had planned on putting all my ideas into practice within the exhibition space. It was to be relational, in person environment evoking atmosphere and emotion through the furniture and accessories I built. There is no substitute for the viewer's experience. Even though I have regrets, I have also gained confidence that I have cultivated from developing my woodworking skills and the motivation I have received from my teachers and studio peers. These are my eternal treasures in the future.

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